



Australian Government

Department of Agriculture, Fisheries and Forestry

A horizontal collage of various agricultural and marine products, including oranges, wheat, corn, and fish, set against a green background.

Agriculture and Climate Change

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Greenhouse 2011 - The Science of Climate Change

4-8 April 2011



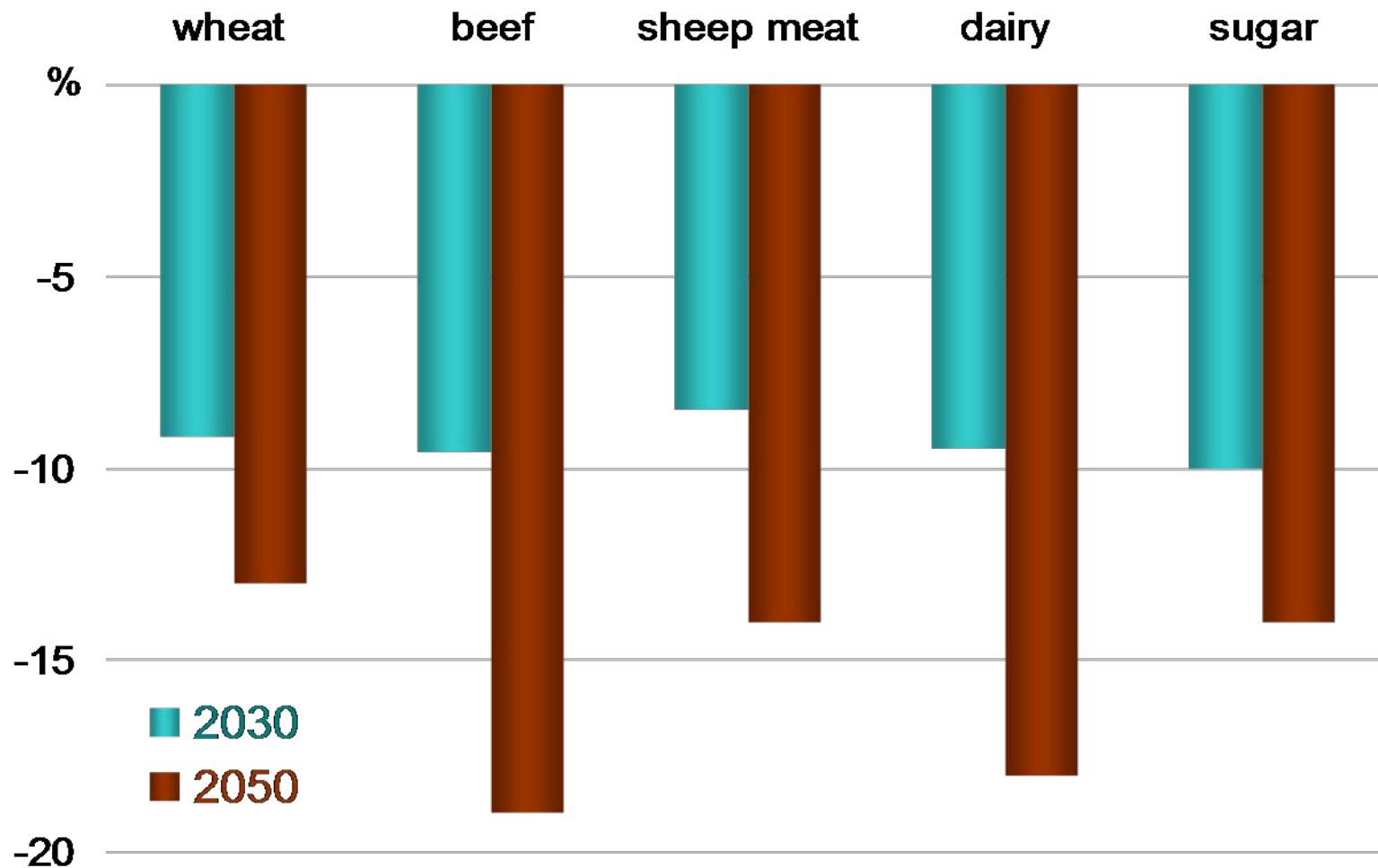
Global Challenge

Rising global demand for food and climate change will challenge farmers to become better managers of energy-water-carbon

Agricultural, land and food processing sectors will likely face pressure to reduce emissions across the supply chain while increasing productivity

Percentage change in Australian agricultural output due to unmitigated climate change

relative to the reference case (no adaptation or mitigation) ABARE 2009





Carbon Farming Initiative

Objectives

Create incentives for land sector abatement while increasing productivity.

Be consistent with the protection of Australia's natural environment and improve resilience to the impacts of climate change.



Carbon Farming Initiative

Legislation based on significant stakeholder feedback.

Key elements

- Additionality requirement simplified
- Ensures against adverse outcomes
- Certain projects can be excluded
- Native title holders can participate
- Reduced transaction costs
- A longer crediting period
- A permanence requirement of 100 years



Carbon Farming Initiative

Eligible Activities include:

- Avoided deforestation
- Forest management
- Increased carbon sequestration through reforestation
- Revegetation
- Soil management
- Reduced methane emissions from livestock
- Manure management
- Reduced emissions from fertilisers
- Savannah burning

Methodologies

Significant research work underway to help develop methodologies.

Under the Australia's Farming Future Climate Change Research Program:

Reducing emissions from livestock research program - \$28.7 million



Nitrous oxide research program - \$10.8 million



Soil carbon research program - \$22 million



Biochar fragments in hand (photo courtesy of CSIRO).

Biochar research program - \$3 million

An additional \$2 million for
biochar research under the
Carbon Farming Initiative.



Market Research

Market research undertaken by DAFF shows that:

Primary producers will take a practical approach to mitigation and adaptation as part of their everyday business.

Research needs to undertake a collaborative approach – working with farmers and demonstrating outcomes.



CFI Landcare Initiative

Farmers will need information about the operation of the carbon offset market and its benefits.

\$4 million for regional landcare facilitators to help land managers understand how the CFI will benefit them.

Indigenous facilitators and NRM facilitators will also participate in this initiative.



Adaptation Research

Farmers are continually adapting to farming and market conditions, building resilience.

Adaptation Research Program - \$38 million

- Climate ready crops, cropping management systems, industry opportunities, perennial horticulture, livestock systems, fisheries systems



Global Research Alliance on Agricultural Greenhouse Gases

Importance of international cooperation on research.

The Global Research Alliance on Greenhouse Gases provides this cooperation.

Food security - find and share ways to reduce emissions while increasing food production.